

# **COMPILATION OF APPROVED SPECIFICATIONS**

**RHODE ISLAND DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION**

**REVISIONS  
SUPPLEMENTAL SPECIFICATIONS  
SPECIAL PROVISIONS**

**SUPPLEMENT NO. 19**

**JULY 2018**

## TABLE OF CONTENTS

<b><u>Section</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
108.03	Prosecution and Progress .....	AC19-1
109.06	Payment for Work .....	AC19-13
938	Price Adjustments .....	AC19-17
938.1000	Price Adjustments .....	AC19-20

Remove **Subsection 108.03, Prosecution and Progress**, pages 1-56 to 1-69 of the RI Standard Specifications for Road and Bridge Construction its entirety and replace it with the following.

## **108.03**

### **PROSECUTION AND PROGRESS**

#### **108.03 PROSECUTION AND PROGRESS.**

##### **a. General Requirements.**

##### **1. Project Schedule Program.**

The Contractor shall develop and maintain an integrated project management and controls program through Completion of all Projects. The Contractor shall initiate the Schedule Development process upon its receipt of the Post-Qualification notification letter. The Special Provisions of the Contract shall identify the applicable schedule requirements, according to the following levels:

- Schedule Level A. Projects with a high level of complexity, impact to the motoring public or community, and/or larger size Projects.
- Schedule Level B. Projects of average to moderate complexity, moderate impact to the motoring public or community, and/or average size.
- Schedule Level C. Smaller projects with minimal to no complexity, and minimal impact to the community. Examples include Projects such as resurfacing, maintenance, and landscaping.

2. The Contractor's schedule is the primary tool for the Contractor to organize and communicate its plan to timely complete the Project. The Contractor's Schedule shall include all Contract requirements, including Work performed by the State, Contractor, subcontractors, vendors, suppliers, utilities, regulatory agencies, and any other third party. The Contractor's Schedule is used to identify the Critical Path and near-critical activities, assess progress, perform contemporaneous delay analyses, project time and resources required for tasks, and identify opportunities for mitigation, if necessary.

3. If the Contractor fails to provide an acceptable Project Baseline Schedule and Project Schedule Update in accordance with the requirements of the Contract, the Contractor shall be responsible for all delays and resulting costs to the Project.

4. The Department may withhold progress payments if the Contractor fails to submit required Schedule Submissions, including but not limited to Schedule Development, Schedule Updates, Project Meeting Minutes and Recovery Schedule Submissions.

5. Software. The software used to generate the Critical Path Method (CPM) Schedule shall be capable of producing schedules in accordance with the requirements of the Contract Documents and fully

compatible with software utilized by the Engineer, including Primavera Project Planner (P6 Professional Release 8.3) or approved equivalent.

**b. Schedule Development.**

**1. Schedule Development Submittals.**

Scheduling and Schedule Submittals shall be based on the defined schedule level. The Schedule Development Process shall commence on the date that the Post-Qualification notification letter is provided to the Contractor, which will be deemed Day 1 for all Schedule Submittals.

2. Meetings will be held as necessary to facilitate the Schedule Development Process. Each Submission shall incorporate the comments from the previous Submission(s). If any Schedule Development Submission does not conform to the Contract, the Contractor shall revise and resubmit prior to proceeding to the next step. Each Submission shall include electronic files in their corresponding format.

The table below details the required Submissions and their corresponding Submission due dates for each schedule level.

STEP	STEP DESCRIPTION*	SCHEDULE LEVEL			ENGINEER REVIEW DEADLINE (After receipt of submission)
		A	B	C	
Step 1	Scheduler's Resume	Day 3		-	3 days
Step 2	Initial Schedule Framework	Day 7	-	-	4 days
Step 3	Complete Schedule Framework	Day 14	Day 14	-	5 days
Step 4	Preliminary Schedule	Day 28	Day 28	Day 28	7 days
Step 5	Baseline Schedule – Activities and Logic	Day 42	Day 42	Day 42	7 days
Step 6	Baseline Schedule – Bid Item Loaded	Day 70**	Day 70**	Day 70**	7 days
Step 7	Baseline Schedule – Resource Loaded Schedule	Day 84	-	-	7 days
Step 8	Project Baseline Schedule	Day 98	Day 98	Day 98	7 days
		<b>All days are calendar days</b>			

\*Refer to Section 4 for Technical Scheduling Requirements; refer to the Special Provisions for project specific information, including Project Groups, ID Standards, Milestones and Activity Data.

\*\*Required by Day 70 but no earlier than 10 Days after NTP.

The requirements for each Schedule Development Submission are listed below.

Step 1: Scheduler's Resume: The Contractor shall retain a scheduler(s) dedicated full-time to the Project with a minimum of three (3) years' experience on Projects similar in size and scope. The scheduler shall be responsible for developing, updating and maintaining the Schedule. The Contractor shall submit the resume of the proposed scheduler(s) to the Engineer within three days of receipt of the Post Qualification notification letter. The Engineer may impose additional conditions based upon qualifications submitted. The scheduler shall be present at all required meetings, including but not limited to the Schedule Development, Schedule Update, and any other meetings which may affect the project Schedule.

Step 2: Initial Schedule Framework:

- a) Work Breakdown Structure (WBS)
- b) Activity Codes: All Contractor defined activity code values.
- c) Calendars: All Contractor defined calendars
- d) Contractor's Submittal List (including all required Contractor Submittals)
- e) Potential VECP, when not otherwise prohibited in the Contract or alternate sequencing/methods.

Step 3: Complete Schedule Framework:

- a) All requirements of Step 2 with prior comments addressed.
- b) Activity Data for all Milestones, Submittals, Procurement and Work by Others. Data includes:
  - (1) Activity ID;
  - (2) WBS ID;
  - (3) Responsibility (RESP) Code;
  - (4) Activity Type; and
  - (5) Calendar IDs.
- c) Resource Definitions (Level A only): labor resources, work types, and equipment resources detailed by crews, incorporating all Engineer comments to date.

Step 4: Preliminary Schedule:

- a) All requirements of Step 3 with prior comments addressed.
- b) Activity Data, including all logic, for all work required to be performed within the first 120 days after the NTP.
- c) All work after the first 120 days from NTP shall be shown in summary activities (summary activities shall not have durations greater than 60 days).
- d) Narrative explaining the sequence of the work and all critical Submittals and activities.

Step 5: Baseline Schedule – Activities and Logic:

- a) All requirements of Step 4 with prior comments addressed.
- b) Completed Schedule showing all work activities and logic for the complete Contract.
- c) Narrative Report.

Step 6: Baseline Schedule - Bid Item Loaded:

- a) All requirements of Step 5 with prior comments addressed.
- b) Complete Bid Item Loaded Schedule.

- c) Schedule Narrative which shall explain the use of resources and an explanation of all logic changes since the Baseline Schedule Submittal.

**Step 7: Baseline Schedule - Resource Loaded Schedule (Level A Only):**

- a) All requirements of Step 6 with prior comments addressed.
- b) Resource loading completed for all activities in the Schedule for the entire Project.
- c) Schedule Narrative, which shall explain the use of resources and an explanation of all logic changes made since the Baseline Schedule Submittal.

**Step 8: Project Baseline Schedule:**

- a) The Contractor shall incorporate and integrate all comments from the previous Steps into the Project Baseline Schedule to conform to the Plans and Specifications.
- b) The Project Baseline Schedule shall be revised and resubmitted until approved by the Engineer. The Contractor shall not change the Project Baseline Schedule after approval by the Engineer.

**c. Project Schedule Updates.**

Project Update Meetings shall be held every two weeks for Level A and monthly for Levels B and C from the time of Notice to Proceed to the completion of the Project. The Contractor shall be required to attend each meeting with all their update information (data as of the data date) compiled in advance. The Contractor shall furnish meeting minutes from the previous Project Meeting, a complete and accurate report of the current progress, a printed Critical Path report, a report of the days gained or lost relative to the Substantial Completion date and any other completion dates and a depiction of how future Work plans shall meet the Contract completion dates and depiction of how future work plans shall meet the contract completion dates. Failure to attend meetings or submit Schedule Updates may result in withheld Progress Payments. At each meeting, the Contractor shall provide sufficient copies of the updated schedules in the format acceptable by the Engineer.

The Contractor shall submit an electronic copy of the Schedule Update Submittals on the scheduled Project Update Meeting date, or no later than two (2) working days after the Project Schedule Update Meeting. Updates shall be submitted even in the absence of a Project Schedule Update Meeting. The Engineer shall have five (5) working days to review the Schedule Update Submittal. The Schedule Updates shall contain the following components:

- (i) Schedule Update Narrative;
- (ii) Schedule Activity Report – Past Month and Remaining;
- (iii) Schedule Activity Report Longest Path (per completion date);
- (iv) Two week Look Ahead Schedule;
- (iv) Predecessor/Successor Report;
- (v) Schedule Data File;
- (vi) Previous Meeting Minutes, and
- (vii) other reports requested by the Engineer.

**Additional Requirements for Schedule Level “A” Projects:**

- (i) the Contractor is required to submit a Four-Week Look Ahead Schedule rather than a Two-Week Look Ahead Schedule, and

- (ii) a monthly Resource Utilization Report.

All Schedule data, logic and duration changes, and any modifications to the Schedule shall be addressed and discussed with the Engineer at the Project Schedule Update Meeting. This shall be done prior to the Contractor submitting their final Schedule Updates.

Changes to the accepted Baseline Schedule will be detailed in the Schedule Update Narrative. The acceptance and inclusion of these changes will not be the sole basis of acceptance or entitlement to any time extension(s) or monetary compensation.

Schedule Update Submittals will never be used as the sole basis for any adjustment in the Contract Time(s), regardless of their acceptance by the Engineer. Any acceptance of the Schedule Update Submittal by the Engineer, either expressed or implied, will only apply to the issue of progress.

**d. Schedule Requirements.** The Department will provide the Contractor with templates during Schedule Development. The Schedules shall be developed and maintained in accordance with the following requirements:

1. **Schedule Narrative:** A description of the sequence of events summarizing the detailed Milestone Status, Critical Path, and all changes made to the Schedule, including Actual Dates, logic revisions, and Calendar and Duration changes. All Project Schedule Submissions shall include a Schedule Narrative as follows:

- (a) Preliminary Schedule Narrative. The Preliminary Schedule Narrative shall:

- (1) Identify the data date and schedule file name.

- (2) Describe the planned flow of work, including details of all key or driving activities/resources for the first 120 calendar days and summarize Project activities thereafter. Summary activities shall not be greater than 60 calendar days in duration.

- (3) Identify proposed alternative methods and product substitutions.

- (4) Include responses to all Engineer's comments and identify and explain all changes made to the Schedule Submission.

- (5) Identify key constraints and potential problems affecting the Contractor's Work.

- (6) For Schedule Level "A" Projects, the Preliminary Schedule Narrative includes:

- (i) A detailed summary of planned labor utilization for the Project for the first 120 calendar days, including the average and maximum number of workers by craft designation on site each month, the shifts to be worked and actual and potential labor resource limitations.

- (ii) A detailed summary of planned operated equipment utilization for the first 120 calendar days, including each type of operated equipment, the quantity each month, the criteria for

mobilizing and demobilizing to and from the site and actual and potential resource limitations.

(b) Baseline Schedule Narrative. The Baseline Schedule Narrative shall:

- (1) Identify the data date and schedule file name.
- (2) Describe the planned flow of Work identifying all key or driving resources.
- (3) Identify proposed alternative methods and product substitutions.
- (4) Include responses to all Engineer's comments and identify and explain all changes made to the Schedule Submission.
- (5) Explain treatment of adverse weather in the Baseline Schedule, including all activities that contain contingency days for adverse weather. Lack of preparation for normal adverse weather is non-excusable.

(6) Identify key constraints and potential problems affecting the Contractor's Work.

(7) For Schedule Level "A" Projects, the Baseline Schedule Narrative shall:

- (i) Summarize planned labor utilization for the Project, including the average and maximum number of workers by craft designation on site each month, the shifts to be worked and actual and potential labor resource limitations.
- (ii) Summarize planned operated equipment utilization, including each type of operated equipment, the quantity each month, the criteria for mobilizing and demobilizing to and from the site and actual and potential resource limitations.
- (iii) Identify resolutions to constraints and potential problems, such as interface with plant operations, coordination with third parties, temporary Contractor facilities or fixed equipment planned for use.

(c) The Schedule Update Narrative shall:

- (1) Identify the Update Period, the data date, and the schedule file name.
- (2) Detail the Work accomplished in the past two weeks and Work planned for the next two weeks.
- (3) Identify and explain why any planned Work was not accomplished and how it affects the Project.



(4) Describe the activities driving the current critical path to each Milestone or Phase Completion Work.

(5) Identify proposed alternative methods and product substitutions.

(6) Include responses to all Engineer's comments and identify and explain all changes made to the Schedule Submission.

(7) Identify any proposed elective changes, including the activities and logic changed, a description of the scope of the elective change, its effect on the Project, driving resources and key constraints.

## 2. Additional Requirements for Schedule Level A.

(a) Identification of activities with critical or near critical float (within ten (10) Working Days of the Critical Path) that were planned to occur during the Update Period, but did not occur or occurred later than the scheduled late start or late finish date, and an explanation of these delays. Identification of delays to activities taking place off the Project site, e.g., Submittal preparation, fabrication, and delivery activities.

(b) Provide a listing of all activities which have surpassed their planned duration by more than twenty (20) percent and justification for maintaining original planned durations for future activities of like work.

(c) A summary of changed plans for labor utilization for the Project, identifying the average and maximum number of workers on site each month. Identify actual and potential labor resource limitations. A summary of the actual labor utilization used over the past month.

(d) A summary of changed plans for equipment utilization for the Project, identifying each type of operated equipment to be used on the Work, the planned quantity of each type of operated equipment utilized each month, and all changes to the criteria for mobilizing and demobilizing each piece of equipment to and from the site. Identify actual and potential equipment resource problems. A summary of the actual equipment utilized over the past month.

## 3. CPM Schedules.

All CPM Schedules shall utilize a Work-Breakdown Structure (WBS) developed by the Contractor. The WBS shall be used as the primary code for displaying and organizing the graphical output schedules utilized for the project, unless otherwise directed by the Engineer. Title case shall be used for WBS and activity descriptions. The following is the basic dictionary for the WBS:

(a) Basic Structure for WBS, where XX are contract specific, alpha-numeric characters that will be defined by the Engineer.

XX.00 Contract Name

XX.10 Milestones

XX.15 Summary Activities  
XX.30 Procurement/Shop Drawings  
XX.40 Utility/RR & Work by Others  
XX.60 Construction

(b) Project Naming Standards:

Preliminary Project Schedule: PS00  
Baseline Schedule: BL00  
Bi-Weekly Status Schedules: Uxxx  
Recovery Schedule: Rxxx

(c) Project Milestones, Interim Completion Dates and Phase Completion Dates. The Contractor shall include Milestones, Interim Completion Dates and/or Phase Completion Dates, if specified in the Contract. Late Finish Constraints shall be assigned to these dates.

(d) Activity Codes. The CPM Schedules shall contain activity code classifications and code values. The Contractor shall propose a coding structure for the Engineer's review and acceptance. The activity code structure combined with the activity identification number shall provide the capability to organize information by location, road or ramp, structure, work type, Subcontractor, discipline, etc., as deemed necessary by the Engineer. The Contractor shall reserve three (3) code classifications (fields) and a minimum of six (6) characters for the Engineer's use.

RESP code will be utilized for identification of responsible party. RESP values shall be discussed at the Schedule Development Meetings.

(e) Activity Descriptions. An activity description shall consist of a work function, construction element and specific location of Work. No two activities will have the same description. Non-specific terminology shall not be used in the activity's description. Any abbreviations used in the activity descriptions shall be defined in the Schedule Narrative Report. The activity description shall be left-justified and in title case.

(f) Activity Durations. The CPM Schedule shall incorporate a minimal number of activities with durations less than two (2) working days and more than twelve (12) working days. The Contractor may request permission from the Engineer to assign durations greater than twelve (12) working days. If the Engineer accepts the Contractor's request to use a long duration, the reason for the request shall be detailed in the Preliminary and Baseline Schedule Narratives.

(g) Activity Type. The following types of activities are required in the Schedule:

(1) Milestones – The Contractor shall only use this Activity Type for Milestones, Interim Completion Dates and Phased Completion Dates as specified in the Contract.

(2) Summary (Hammock and Level of Effort Activities) Schedule Activities –The Contractor shall maintain a Summary Activity Schedule. These schedule activities shall remain in all of the Schedule Submittals. The predecessor and successor activities of the Summary Activities may be

modified to include all those activities that are entered into the Schedule and considered part of the respective Summary Activity's scope of work.

(3) Task Activities - This is the primary activity type. All activities other than Milestone and Summary as defined above shall be task activities.

(h) Activity Dates. Activity Early and Late Start and Finish dates shall be calculated for each activity based upon the schedule data date, actual dates, schedule logic, schedule constraints, calendars, and original duration or remaining duration in accordance with the scheduling parameters defined in this section.

The Contractor shall provide actual start and finish dates to the Engineer for approval. In the event of a disagreement, the Engineer will assign the dates to be used for the activities at issue.

(i) Activity Bid Item Loading. All bid items listed in the proposal pages shall be assigned to its corresponding schedule activity or distributed to a group of activities through the use of Primavera's resources dictionary and resource assignment.

The total value and quantities of the activities allocated to each bid item shall equal the total value and quantities of the corresponding bid item listed in the proposal.

(j) Calendars. The Contractor shall include the below referenced calendars in the Schedule or may request approval from the Engineer to create additional calendars. It is the responsibility of the Contractor to schedule the Work in accordance with the Contract. The Contractor shall not schedule Work during winter shutdown or other contract shutdown periods unless permitted by Contract or as permitted by the Engineer. If work during the winter shutdown period is approved by the Engineer, the Department will not consider delays during this time period eligible for a time extension.

The following calendars are:

Calendar 1 - 5-day workweek (includes Holidays and Winter Shut Down)  
Calendar 2 - Procurement  
Calendar 3 - 6-day workweek (includes Holidays and Winter Shut Down)  
Calendar 4 - 7-day workweek (includes Holidays and Winter Shut Down)  
Calendar 5 - 5-day workweek (includes Holidays and No Winter Shut Down)  
Calendar 6 - 6-day workweek (includes Holidays and No Winter Shut Down)  
Calendar 7 - 7-day workweek (includes Holidays and No Winter Shut Down)  
Calendar 8 - Interstate 5-day workweek (includes Holidays & Winter Shut Down)  
Calendar 9 - Interstate 6-day workweek (includes Holidays & Winter Shut Down)  
Calendar A - Seeding  
Calendar B - Wetland Seeding  
Calendar C- Plants B&B

(k) Data Date.

The following are the definitions of the data dates for the CPM Schedules:

- (i) Preliminary CPM Schedule –Date of Bid Opening
- (ii) Baseline CPM Schedule –Date of Bid Opening
- (iii) Status Update Schedules –TBD at Schedule Development Meeting

(l) Logic.

(1) The logic in the Schedules shall represent the progression of time and the sequence of work performed within the Contract Time(s). The CPM Schedules shall conform to the following requirements:

(2) Every activity shall have logically assigned predecessors and successors. Unless otherwise specified, “Bid Opening” shall be the only activity without a predecessor, “Substantial Completion” and each Milestone or Phase Completion shall be the only activities without successors.

Activity Constraints are limited to the use of Start-No-Earlier-Than and Finish-No-Later-Than, for access restraints and Completion Milestone(s) or Phase(s). The Contractor shall request permission from the Engineer to use these constraints for other activities prior to the incorporation in the CPM Schedule. The use of “Zero Free Float,” “Start-On,” “Expected Finish,” “Mandatory Start” or “Mandatory Finish” is prohibited.

Activity lag durations shall not have a negative value unless approved by the Engineer. Activity lags shall not be used in lieu of logic relationships.

Redundant ties to preceding activities in a sequential series of activities is not allowed. A tie representing a different constraint will not be considered redundant.

(m) Schedule Layout Requirements. The Engineer will provide the Contractor with the required layouts and templates for the Schedule.

(n) Schedule Calculations. Performing scheduling calculations requires the following settings.

- (1) Turn off automatic scheduling and leveling.
- (2) When scheduling activities, apply retained logic.
- (3) Calculate the start-to-start lag from early start.
- (4) Schedule durations as contiguous.
- (5) Show open ends as non-critical.
- (6) Calculate total float as finish float.

(7) Summary calculations shall use Calendar No. 1 and the weighting factor for determining percent complete shall be duration.

(8) Set the auto-inserting option on automatic with a minimum increment of three (3).

(9) Initially set critical activities using defined critical as total float less than one (1). This option may be changed at the direction of the Engineer.

(10) Set language for output as U.S. English.

(o) Submittals and Procurement. The Schedule shall include activities for all items within the Contractor's Submittal List (CSL). Each submittal item shall have an activity for submittal preparation, review, fabrication, and delivery. The Contractor is responsible for the accuracy and completeness of its schedule activities, and for any delays resulting from inaccurate or incomplete submissions.

**e. Review and Acceptance of Project Schedule Submittals.**

The Engineer will review Schedule Submittals for conformance with the requirements of the Contract Documents. The planning, scheduling, and execution of the Work and the accuracy of any Project Schedule is the responsibility of the Contractor. The Contractor remains responsible for errors in any previously accepted Project Schedule, including but not limited to omitted activities, activity durations, relationships between activities, resource allocation, or any float suppression techniques. The Engineer may direct the Contractor to address and adjust schedules that do not accurately reflect the Work at any time, with no additional cost to the State. Acceptance of any Project Schedule does not relieve the Contractor of any responsibility for the completion of the work in conformance with all Contract requirements.

**f. Progress Delays.**

The Contractor shall identify and promptly report to the Engineer all schedule and progress delays during the prosecution of the work. Whenever the Project Schedule Update indicates late critical path progress by 20% or more in Contract Time, or at the Engineer's request, the Contractor shall develop and submit a Recovery Schedule in the form of a proposed Baseline Schedule Revision.

The Contractor is not relieved from the submission of Project Schedule Updates during the development of a Recovery Schedule.

The Recovery Schedule shall illustrate a clear process and procedure for eliminating or mitigating said delays to the Contract Time(s). The Recovery Schedule shall be submitted within (30) calendar days of the corresponding Project Schedule Update and is subject to approval by the Engineer.

Non-Excusable Delays: The development and submission of the Recovery Schedule shall be at no additional cost to the State.

Excusable Delays: The State may reimburse the Contractor for the costs of the development the Recovery Schedule.

The Engineer may withhold progress payments, either in whole, or in part if the Contractor fails to submit a Recovery Schedule.

1. Baseline Schedule Revisions.

Project Baseline Schedule Revisions shall conform to all requirements for approval of the Project Baseline Schedule and associated updates, including but not limited to inclusion of added or deleted activities, changes to logic or relationships, and a distribution of costs for the added Work or changes.

The Engineer shall review and comment on this revision within 14 calendar days of its submission.

The final draft of the proposed Baseline Schedule Revision shall incorporate all approved changes and be submitted for acceptance within 5 calendar days following the Engineer's approval.

The approved Baseline Schedule Revision shall be referred to as “Baseline Schedule of Record – rev #” in subsequent Project Schedule Update submittals.

A Baseline Schedule Revision is required whenever there is a change to the Baseline Schedule of Record or its corresponding Project Schedule Update, and whenever a Progress Delay threshold is triggered.

Remove **Subsection 109.06, Partial Payments**, pages 1-83 and 1-84 of the RI Standard Specifications for Road and Bridge Construction in its entirety and replace it with the following.

## **109.06**

### **PAYMENT FOR WORK**

#### **109.06 PAYMENT FOR WORK.**

**a. General.** The Department will make payment for Work before the Project is accepted and final payment is made. These payments for Work will be processed via progress payments. To receive a payment for Work, the Contractor shall prepare an invoice in accordance with **Subsection 109.06(c)**. The Department may suspend progress payments if the Contractor does not comply with the terms of the Contract or the Engineer's instructions or written directives. The Department will notify the Contractor whenever progress payments will be suspended. Processing of progress payments for work prior to the Department's acceptance and final payment of the Work does not constitute the Department's acceptance of the Work, and does not relieve the Contractor of responsibility for the Work, which includes but is not limited to:

1. Protecting, repairing, correcting, maintaining, or renewing the Work where necessary to meet Contract requirements before acceptance.
2. Replacing or repairing all defective Work or materials used in the construction of the Work, and repairing all damage to other work or materials whose damage is attributable to such defective Work or materials.
3. All defects or damage that the Engineer may discover on or before the Engineer's acceptance and final payment of the Work. The Engineer is the sole judge of these defects or damage.

**b. Frequency.** The Department will make progress payments bi-weekly (every two weeks) in accordance with established Department procedures. Progress payments will be subject to a 5 percent retainage. Retainage will be released incrementally in accordance with **Subsection 105.16** and the Department's Release of Retainage Procedures.

**c. Invoice for Payment for Work.** The Contractor shall submit an invoice for payment bi-weekly (every two weeks), and, as requested by the Engineer, a weekly progress report for review detailing the items included in the invoice. The Contractor shall utilize and complete invoice forms supplied by the Department, including a certification for payment, in accordance with the instructions contained thereon.

**d. Invoice for Partial Payment for Materials, Supplies, and Equipment.** The Engineer may allow invoicing as provided above and permit partial payments for those materials, supplies, and equipment delivered to an approved location but not yet incorporated into the Work. Payment for

materials, supplies and equipment furnished at an approved site but not yet incorporated into the Work will not exceed the lesser of the following amounts:

1. 100 percent of the cost incurred by the Contractor, or
2. 80 percent of the value calculated by multiplying the quantity of the item delivered by the unit price for the corresponding item in the Bid Schedule.

For verification of costs, the Contractor shall provide the Engineer with an original paid supplier's invoice for the furnished materials, supplies or equipment within thirty (30) days after receiving the partial payment. Otherwise, the amount of the partial payment will be deducted from subsequent invoices.

The Engineer will not approve any payment for perishable plant materials until such plant materials are planted as specified in the Contract.

**e. Engineer's Review of Contractor's Request for Payment for Work and Request for Partial Payment for Materials, Supplies, and Equipment.** Upon receipt of the Contractor's invoice, the Engineer will review the invoice and may approve or reject payment or portions thereof. The Engineer will notify the Contractor in writing of any modifications and/or rejection of the invoice. Modifications and reasons for the change will be made to the Excel spreadsheet in the columns provided. In the case of a rejection, the Engineer will request that the invoice be resubmitted.

**f. Subcontractor Payments and Release of Retainage.** The Contractor shall notify RIDOT within 7 days upon the Contractor's assessment that the subcontractor's work is complete and ready for inspection for partial acceptance by RIDOT.

The Contractor shall make progress payments to the subcontractor incrementally as the Contractor is paid progress payments by RIDOT, with each progress payment made no more than 30 days from when so paid by RIDOT. The Work of a subcontractor will be inspected by RIDOT within 14 days of the date of Contractor's notification for partial acceptance. Within 30 days of partial acceptance of the completed subcontract work, the Department will pay the Contractor for all work covered by the acceptance including the relevant portion of retainage due the subcontractor. Within 30 days of receipt of such payment, the Contractor shall pay the subcontractor for all accepted subcontract work including all retainage owed. The Contractor must obtain RIDOT's prior written consent for good cause delays in or postponement of payment to the subcontractor.



**Procedures for Section 109.06 - Payment for Work**

The Contractor shall prepare an invoice to apply for a payment for work completed. This invoice shall utilize the Request for Payment templates supplied by the Department, including the following attachments:

**A. Detailed Invoice** - The detailed invoice shall be submitted in both hard copy and Excel® and include the following information:

1. The date of the invoice.
2. The Project Name and State and Federal-Aid Project Numbers.
3. The Contract Item number(s) and name(s) for which the Contractor is seeking payment, as they appear in the Contract Proposal.
4. The date(s) each Contract Item was performed.
5. Name of Contractor/Subcontractor(s) that performed the work.
6. The location(s) where the Work associated with each Contract Item was performed, cross referenced to the location(s) shown in the Distribution of Quantities.
7. Invoiced Item Quantities: The quantity of each Contract Item performed by date and by location since the previous invoice.

For Lump Sum Items, the Contractor shall provide the percentage of work completed since the previous invoice. Prior to the start of work, the Contractor shall submit a Lump Sum Item Breakdown for the Engineer's review, acceptance and allocation of payments for the item, in accordance with **Section 109.07** of the Standard Specifications.

All calculations shall conform to the Method of Measurement and Basis of Payment portions of the appropriate Item Code(s). Documentation shall include, but is not limited to, backup calculations, measurements, sketches, and related supporting information.

8. Cumulative Item Quantities: A cumulative total of the quantities performed for each Contract Item, including the current request.
9. Bid Prices: The Contract Price for each Contract Item, including Unit Bid Items and Lump Sum Bid Items as applicable, shall be listed for each item being invoiced.
10. Extended Prices: Calculate the extended price of each item being invoiced in this request.

For Unit Bid Items, this is to be calculated by multiplying each item quantity completed during the invoice period by its Contract Unit Bid Price (i.e.,  $\text{Extended Price} = \text{Qty. Invoiced} \times \text{Unit Bid Price}$ ).

For Lump Sum Items, this is to be calculated by multiplying each item by the percentage of

work completed during the invoice period by its Lump Sum Bid Price (i.e., Extended Price \$ = % Complete-this-invoice-period x Lump Sum Bid Price).

11. Total Invoice Price: Sum all extended prices calculated in step 10 and report this amount as the total amount being invoiced under the request.

- B. Certificates of Compliance** - A list of the Certificate(s) of Compliance attached or that have been submitted to the Department, including date(s) submitted, for the work that is listed on the invoice in accordance with **Section 106.04, Certification of Compliance**.
- C. Certified Payrolls** - A list of the certified payrolls attached or that have been submitted to the Department, including date(s) submitted, for the work that is listed on the invoice. List all outstanding payrolls yet to be submitted by week ending date and Contractor\Subcontractor(s).
- D. Subcontractor Payments** - A list of all payments (including all retainage payments) made to date to subcontractors for amounts previously billed and paid by the State for the related project.
- E. Extra Work**- A list of approved and/or potential extra work subject to approval, including dates(s) when the work was identified and/or approved, and a description and associated cost(s) of the work, including information pertaining to when and by whom the work was performed.
- F. EEO Certification** - A statement that all EEO documentation has been submitted as required by the Contract.
- G. As-Built Data** - A set of as-built data in hard copy or electronic form of the work billed on the invoice, including plans, sketches, diagrams and all other information necessary for resulting in a complete and accurate set of as-built data representing the work completed. A final set of as-built plans is also required in accordance with **Section 934.03.3 (h), Field Control and Construction Layout**.

**General** - Outstanding or missing documentation for Items A through G above will be a basis for rejection and/or modification of the Request for Payment.

Remove **SECTION 938, PRICE ADJUSTMENTS**, pages 9-73 to 9-74 of the RI Standard Specifications for Rhode and Bridge Construction and page AC-247 of the Compilation of Approved Specifications, May 2016 in their entirety and replace them with the following.

## **SECTION 938**

### **PRICE ADJUSTMENTS**

**938.01 DESCRIPTION.** The intent of this provision is to ensure adequate and fair compensation for unpredictable and fluctuating costs which, from time to time, occur in the prices of Liquid Asphalt, Diesel Fuel and Steel, as described below. The price adjustment provisions are made part of the Contract to provide for more cost-effective risk-balanced bids and to optimize competition in those areas where more risk is to be assumed by the Contractor. This applies to both lump sum and unit price items.

#### **938.02 DEFINITIONS.**

**938.02.1 Base Price of Liquid Asphalt and Diesel Fuel.** The base price is the unit price of the material (FOB Terminal), as determined by the Department. The base prices for Liquid Asphalt and Diesel Fuel will be determined just prior to the first date that the NOTICE TO CONTRACTORS is advertised in the public press.

**938.02.2 Period Price of Liquid Asphalt and Diesel Fuel.** The period prices for Liquid Asphalt and Diesel Fuel (FOB Terminal) will be determined for any one-month period following the NOTICE TO PROCEED during which the price varies from the base price.

**938.02.3 Base Price (BP) for Steel.** The Base Price for Steel will be determined by the Department just prior to the first date that the NOTICE TO CONTRACTORS is advertised in the public press.

**938.02.4 Period Price Index (PPI) for Steel.** For all steel items, the PPI will be defined as the Bureau of Labor Statistics (BLS) Producer Price Index (PPI) for "Steel Mill Products," Series ID WPU 1017-02 (not seasonally adjusted). The latest version of the index will be used, including any corrections or rebasing of the index. PPI will be defined as the BLS PPI at the time that material is purchased from the mill, as specified by the invoice date.

**938.02.5 Base Price Index (BPI) for Steel.** For all steel items, the Base Index (BPI) will be defined as the BLS PPI just prior to the first date that the NOTICE TO CONTRACTORS is advertised in the public press.

**938.02.6 Period Price (PP) for Steel.** The period price for steel shall be calculated as follows:  $PP = (BP \times (PPI/BPI))$ .

**938.03 PRICE ADJUSTMENT.** Price adjustments for Liquid Asphalt and Diesel Fuel will be determined by the difference between the Period Price and the Base Price. Price adjustments for Liquid Asphalt and Diesel Fuel will be made at the end of each month during which a) work was accomplished on the project, and b) prices varied.

Price Adjustments for steel will be calculated every month that steel is purchased, but only applied when steel price indices vary by more than 5.0 percent.

Price adjustments for work performed after the contract completion date, including approved time extension(s), will be as follows:

Credit due the Contractor will be the lesser amount calculated from the following two algorithms (a and b), whereas credit due the Department will be the greater of the two calculations.

a. The price adjustment calculated using the actual monthly Period Prices in effect at the time of the construction.

b. The price adjustment calculated using the monthly Period Prices in effect during a period determined by setting the last day of relevant work to the contract completion date as may have been modified by approved time extension(s).

Price adjustments due the Contractor will be made in accordance with an approved Contract Addendum. Credit due the Department will be processed by deducting monies from progress payments or by other means if there are insufficient progress payments remaining.

**938.03.1 Liquid Asphalt Cement.** The asphalt content will be the optimum amount used in every ton of bituminous concrete mixture, as determined by the Department's Materials Engineer, using the method for determination of optimum asphalt cement content as set forth in **SECTION M.03** of these Specifications.

The Price Adjustment will be determined by multiplying the total weight of liquid asphalt, in tons, by the difference between the base price and period price.

The Base Price of Liquid Asphalt Cement is set forth in **Special Provision Code 938.1000**.

**938.03.2 Diesel Fuel.** The fuel for operating the plant, and the fuel for hauling and placing bituminous concrete, will equal the total number of tons of bituminous concrete placed during the month in question times a fuel adjustment factor of 2.5 gallons of fuel per ton of bituminous concrete. Tonnage of bituminous concrete placed during the month in question will equal the sum of the weights indicated on the Daily Automated Recordation printout slips provided at the plant.

The Price Adjustment will be determined by multiplying the total volume of fuel, in gallons, by the difference between the base price and the period price.

No price adjustment will be made unless the amount of the adjustment, plus or minus, exceeds \$250.00 for the month.

The Base Price of Diesel Fuel is set forth in **Special Provision Code 938.1000**.

**938.03.3 Steel.** Steel price adjustments will apply only when specified in the Contract and only to unfabricated structural steel material, consisting of rolled shapes, plate steel, sheet piling, pipe piles, steel castings, steel forgings, and unfabricated reinforcing steel bars. Payments will only be made for fluctuations in the cost of the steel material used in the items specified. Steel price adjustments will not be made to steel purchased prior to the time of bid opening for conventional contracting methods (design/bid/build) or submittal of price proposals for all other contracting methods.

Steel price adjustments will not include the costs of shop drawing preparation, handling, fabrication, welding, erection, surface preparation, coatings, transportation, storage, staging, installation, profit, overhead, fuel costs, fuel surcharges, or other such charges not related to the cost of the unfabricated structural steel and unfabricated reinforcing steel.

The weight of steel subject to a price adjustment will be calculated based on approved shop drawings.

For all steel items specified above, the Price Adjustment will be determined according to thresholds as follows:

If the absolute value of  $[(PP-BP)/BP]$  is less than or equal to a threshold of 0.050, then no price adjustment is made.

If the absolute value of  $[(PP-BP)/BP]$  is greater than 0.050, then a price adjustment is made and will apply to the full variance between the Base Price and the Period Price.

If the threshold is exceeded and the PP is higher than the BP, the price adjustment owed to the Contractor is calculated as follows:

- $[PP-BP] \times \text{Weight of steel}$

If the threshold is exceeded and the PP is lower than the BP, the price adjustment owed to the State is calculated as follows:

- $[BP-PP] \times \text{Weight of steel}$

The Base Price of Steel is set forth in **Special Provision Code 938.1000**.

**938.1000**

**PRICE ADJUSTMENTS**

**DESCRIPTION.**

**a. Liquid Asphalt Cement.** The Base Price of Liquid Asphalt Cement as required to implement **Subsection 938.03.1** of the Standard Specifications is \$\_\_\_\_\_ per ton.

**b. Diesel Fuel.** The Base Price of Diesel Fuel as required to implement **Subsection 938.03.2** of the Standard Specifications is \$\_\_\_\_\_ per gallon.

**c. Steel.** The Base Price of Steel as required to implement **Subsection 938.03.3** of the Standard Specifications is:

Structural Steel                      \$\_\_\_\_\_ per pound;

Reinforcing Steel                    \$\_\_\_\_\_ per pound;

Stainless Steel                      \$\_\_\_\_\_ per pound.